(No Model.)

C. E. FOWLER.

BRIDGE FLOORING.

No. 559,774. Patented May 5, 1896.

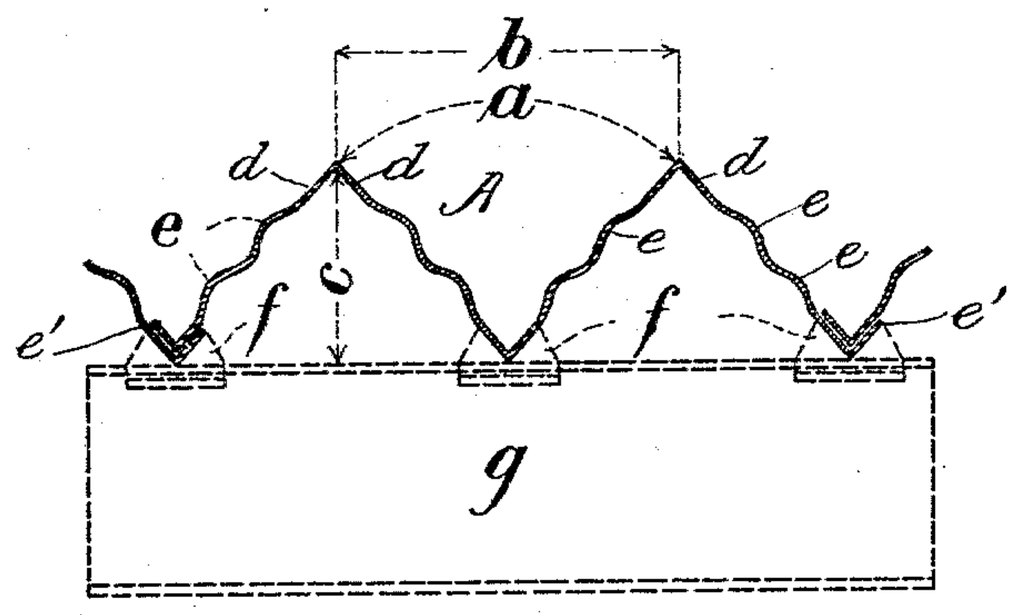

Fig. 1.

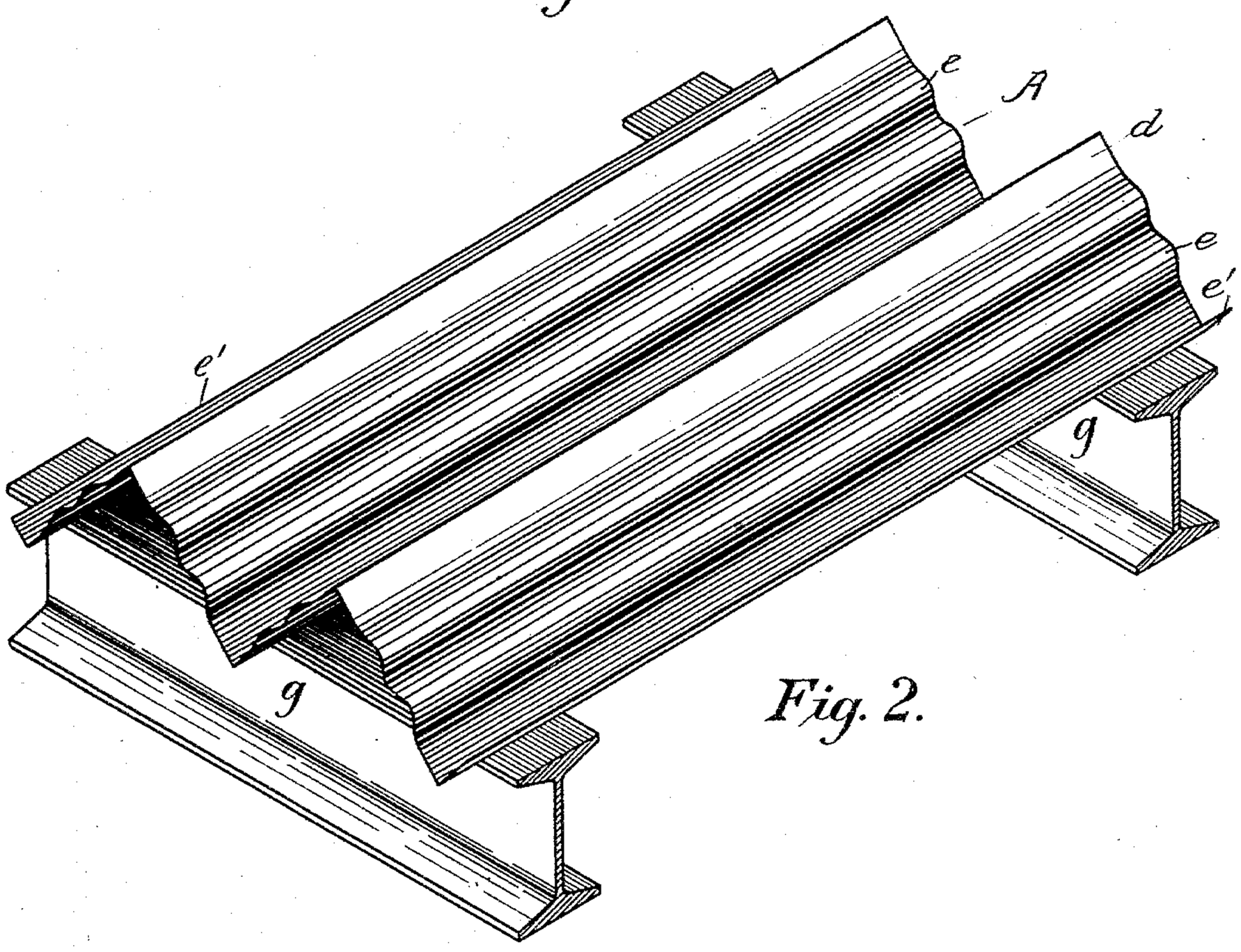

Fig. 2.

Witnesses,
John. D. Rees
A. H. Heller

Inventor;
C. E. Fowler.
per Herbert H. Dennes.
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES EVAN FOWLER, OF YOUNGSTOWN, OHIO, ASSIGNOR OF ONE-HALF TO JOHN O. PEW, OF SAME PLACE.

BRIDGE-FLOORING.

SPECIFICATION forming part of Letters Patent No. 559,774, dated May 5, 1896.

Application filed January 20, 1896. Serial No. 576,056. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EVAN FOWLER, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Bridge-Flooring; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a flooring for bridges, which is also applicable to the floors and ceilings of fireproof buildings and metallic structures.

This invention consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a cross-section through one of the floor-plates. Fig. 2 is a perspective view of a floor-plate.

A is the floor-plate, which is angle-shaped in form and is provided with corrugations *e* upon its inclined sides or faces. The floor-plate is made in sections of any desired length, and each section preferably comprises four inclined side portions *d;* but the sections may have two or six or more inclined side portions, if desired. The angle *a* between the inclined sides is preferably an angle of forty-five degrees; but it may be more or less than forty-five degrees, if desired. The height *c* of the plates and the distance *b* between their apices vary in proportion to the size of the plates and the particular use to which they are to be put. Each floor-plate is provided with two upwardly-projecting flanges *e'*, one on each side, and the adjacent floor-plates are secured together by means of these flanges, which interlock with each other. The floor-plates may, however, be secured together in any other approved manner, such as by angle-irons and rivets, if desired. The floor-plates are formed of thin sheets of metal, and the corrugations *e* strengthen the side portions *d* and permit the use of much thinner sheet metal than would be possible if the said side portions were flat. The floor-plates rest upon girders *g* in the usual manner, and chairs *f* may be interposed between the floor-plates and the girders, if desired. The angular spaces above and between the floor-plates are filled in with cement to form the roadway in any approved manner.

What I claim is—

1. A floor-plate, comprising longitudinally-corrugated side portions, arranged at and connected together at an angle, and formed integral with each other, substantially as set forth.

2. A floor-plate, comprising longitudinally-corrugated side portions, arranged at and connected together at an angle, and provided with flanges at their outer edges, all the said parts being formed integral with each other, substantially as set forth.

3. A floor-plate, comprising a series of side portions formed integral with each other, each said side portion being arranged diagonally and forming angles with the next adjacent side portions, and all the said side portions having corrugations in their faces, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES EVAN FOWLER.

Witnesses:
WM. W. ZIMMERMAN,
DAVID T. JONES.